



# UNITED STATES PATENT AND TRADEMARK OFFICE

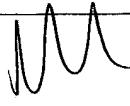
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

HS

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/941,984   | 08/30/2001  | Susumu Takahashi     | 950088B             | 7633             |
| 23850  | 7590        | 12/07/2004           | EXAMINER            |                  |
| ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP<br>1725 K STREET, NW<br>SUITE 1000<br>WASHINGTON, DC 20006 |             |                      | LEUBECKER, JOHN P   |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3739                |                  |

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |  |
|------------------------------|------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>  |  |
|                              | 09/941,984             | TAKAHASHI ET AL.<br> |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>  |  |
|                              | John P. Leubecker      | 3739   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 20 August 2004.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4,10-13, 19 22,23,35-38,40,44,49-53,55,56 and 58-71 is/are pending in the application.
- 4a) Of the above claim(s) 10-13,22,23,35-38,40-53,55,56 and 64-70 is/are withdrawn from consideration.
- 5) Claim(s) 19,60,62,63 and 71 is/are allowed.
- 6) Claim(s) 1,2,58,59 and 61 is/are rejected.
- 7) Claim(s) 4 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 09/053,094.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_ .
- 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “at least one image taking means being made on the final image surface of said image transmitting optical system” (claim 58) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claim 61 is objected to because of the following informalities: in claim 61, phrase “an adapter optical system reform the final images” is improper. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 58 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed fails to disclose or suggest the "at least one image taking means being made on the final image surface of said image transmitting optical system". The Examiner is giving the phrase "being made on" its ordinary meaning (e.g., being formed on and directly attached to the final image surface). No embodiment in the disclosure suggests that an image taking means (e.g., CCD) could be attached to the surface of a lens (e.g., optical system).

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 58 and 61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 58, term "the final image surface" lacks antecedent basis. This phrase is also indefinite with respect to its intended meaning: is it referring to the last physical surface of the optical system (in which case "final surface" might suffice) or is it possibly improperly referring to the non-physical image plane formed by the optical system?

As to claim 61, term "the final images" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi (U.S. Pat. 5,522,789).

In Figure 10(a), Takahashi discloses an elongated inserted section (25), an illuminating light projecting means (not numbered but inherent in any endoscope intended to view inside the body), an objective optical system at the distal end of the inserted section and having two optical systems (3a,3b) forming at least two images not equal to each other (i.e., having parallax) and one image transmitting optical system (26) having a single optical axis and being formed to be of a size equal to or larger in the radial direction than a size of the objective optical system. The

two optical systems are eccentric and on each side of the optical axis of the image transmitting optical system.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

9. Claim 61 is rejected under 35 U.S.C. 102(e) as being anticipated by Akui et al. (U.S. Pat. 5,577,991) for the reasons set forth in numbered paragraph 7 of the previous Office Action, paper number 9. It is noted that the adapter optical system (66,67) forms images that are wider (out to the CCDs) than the final images.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Art Unit: 3739

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 59 is rejected under 35 U.S.C. 103(a) as being obvious over Akui et al. (U.S. Pat. 5,577,991) for the reasons set forth in numbered paragraph 9 of the previous Office Action, paper number 9.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or

subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

***Allowable Subject Matter***

12. Claims 19, 60, 62, 63 and 71 are allowed.
13. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

14. Applicant's arguments filed February 17, 2004 have been fully considered but they are not persuasive.

Reconsideration and examination of the claims as amended in the amendment filed February 17, 2004 appears above. The Examiner agrees with Applicant with respect to the differences between the amended claims and JP Pat. 4-16812. Hence, the previous rejections using this reference have been withdrawn. It is noted that the Examiner does not agree with Applicant's interpretation of the Akui et al. (U.S. Pat. 5,577,991) reference. It is the Examiner's position that Akui et al. does indeed disclose forming two images at the spatially separated positions by the objective optical system. This is evidenced by the positioning of prisms (63a) and (63b) with respect to the image transmitting optical system (65), as shown in Figure 19. Note that the prisms do not allow the images to overlap or share the same position in space. Also

Art Unit: 3739

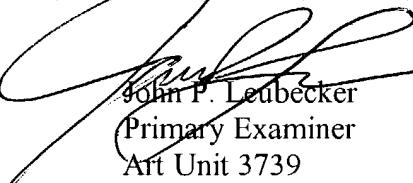
note column 12, lines 53-56 which describe the images with respect to the transmitting optical system as passing "concurrently but separately relative to pupils".

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Leubecker  
Primary Examiner  
Art Unit 3739

jpl